

CLAIMS:

What is claimed is:

1. A method in a data processing system for mimicking a device for use within the data processing system, wherein the device may be connected to a bus, the method comprising:  
5 detecting a signal on the bus indicating a request to access the device;  
monitoring the bus for a response by the device; and  
sending a response to the signal when a selected period of time passes without a response being made by the device.

10 2. The method of claim 1, wherein the bus is a small computer system interface bus.

3. The method of claim 1, wherein the step of sending a response includes sending a first signal that indicates a presence of the device being mimicked on the bus.

15 4. The method of claim 3, wherein the first signal is a busy signal.

5. The method of claim 3, wherein the step of sending a response further includes sending a second signal to response to the request.

20 6. The method of claim 5, wherein the second signal is a not ready signal.

7. The method of claim 5, wherein the second signal is a pre-selected data sequence.

8. The method of claim 1 further comprising:  
25 detecting a signal on the bus indicating a request to access a second device;

monitoring the bus for a response by second device; and  
sending a response to the signal a selected period of time passes without a response being  
made by the second device.

5 9. The method of claim 1, wherein the device is absent from the data processing system.

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10. The method of claim 1, wherein the device is connected to the bus and unable to response  
to the request within the selected period of time.

10 11. The method of claim 1, wherein the response is a pre-set response.

12. The method of claim 1, wherein the response is a response acquired by monitoring the  
bus for responses made by the device when the device is present on the bus.

15 13. The method of claim 1, wherein the detecting, monitoring, and sending steps are  
implemented in a state machine.

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20 14. A method for emulating a device during initialization of an operating system, wherein the  
device is configured for use within a data processing system and may be attached to a bus within  
the data processing system, the method comprising:

monitoring the bus for a signal selecting the device for an input/output transaction during  
initialization of the operating system;

monitoring the bus for a response by the device in response to detecting the signal  
selecting the device; and

25 sending a response to the signal a selected period of time passes without a response being  
made by the device, wherein the response indicates to the operating system that the device is

present within the data processing system.

15. The method of claim 14, wherein the bus is a small computer system interface bus.

5 16. The method of claim 14, wherein the step of sending a response includes sending a signal that indicates a presence of the device being emulated on the bus.

17. The method of claim 16, wherein the first signal is a busy signal.

18. A data processing system comprising:

a bus;

detection means for detecting a signal on the bus indicating a request to access the a device;

monitoring means for monitoring the bus for a response by the device; and

15 transmission means for sending a response to the signal a selected period of time passes without a response being made by the device.

19. The data processing system of claim 18, wherein the bus is a small computer system interface bus.

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20. The data processing system of claim 18, wherein transmission means includes means for sending a first signal that indicates a presence of the device.

21. The data processing system of claim 20, wherein the first signal is a busy signal.

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22. The data processing system of claim 20, wherein the transmission means further includes

means for sending a second signal to respond to the request.

23. The data processing system of claim 22, wherein the second signal is a not ready signal.

5 24. The data processing system of claim 22, wherein the second signal is a preselected data sequence.

25. The data processing system of claim 18, wherein the device is absent from the data processing system.

10 26. The data processing system of claim 18, wherein the device is unable to respond to the request.

15 27. A data processing system comprising:  
a bus;  
a plurality of devices connected to the bus; and  
a mimic device connected to the bus, wherein the mimic device monitors the bus for a signal selecting a selected device within the plurality of devices for an input/output transaction during initialization of an operating system within the data processing system, monitors the bus  
20 for a response by the selected device in response to detecting the signal selecting the device, and sends a response to the signal a selected period of time passes without a response being made by the selected device, wherein the response indicates to the operating system that the selected device present within the data processing system.

25 28. The method of claim 27, wherein the bus is a small computer system interface bus.

29. The method of claim 28, wherein the signal is a busy signal.

30. A data processing system comprising:

a bus;

a plurality of devices attached to the bus; and

a mimic device attached to the bus, wherein the mimic device has a plurality of modes of operation including:

a first mode of operation in which the mimic device monitors the bus for a request to a selected device within the plurality of devices;

a second mode of operation, responsive to detecting the request, in which the mimic device monitors the bus for a response from the selected device; and

a third mode of operation, responsive to an absence of a response from the selected device within a period of time, in which the mimic device sends a response to the request onto the bus.

31. The data processing system of claim 30, wherein the response includes sending a busy signal onto the bus.

32. The data processing system of claim 30, wherein the response includes sending a not ready signal onto the bus.

33. The data processing system of claim 31, wherein the response includes sending a second signal onto the bus.

34. The data processing system claim 30, wherein the bus is a small computer system interface bus.

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35. A computer program product for use with a data processing system for mimicking a device, a computer program product comprising:

a computer usable medium;

first instructions for detecting a signal on the bus indicating a request to access a device;

second instructions for monitoring the bus for a response by the device; and

third instructions for sending a response to the signal a selected period of time passes without a response being made by the device, wherein the instructions are embodied within the computer usable medium.

36. The computer program product of claim 35, wherein third instructions includes instructions for sending a first signal that indicates a presence of the device.

37. The computer program product of claim 36 wherein the first signal is a busy signal.

38. The computer program product of claim 36, wherein third instructions further includes instructions for sending a second signal in response to the request.

39. The computer program product of claim 38, wherein the second signal is a not ready signal.

40. The computer program products of claim 38, wherein the second signal is a preselected data sequence.

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